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INTRODUCTION:

Project Team Building for Success



"Project management is like juggling three balls time, cost and quality."

-G. Reiss

A UDOT Project Manager is expected to juggle scope, schedule, budget and quality. An intricate part of that includes the elements of innovation and communication. The key to keeping all of the balls in the air is to identify, align and lead the team members to successfully complete the project. The ability to manage and lead team members is growing in importance as more generations join the workforce and projects become increasingly complex. Technical and management skills are not enough to ensure project success. The Project Manager's role is to ensure the network of all stakeholders, including team members, is intact and communication in that network is strong and reliable. The Project Manager is the hub for UDOT, connecting project resources to the end users.

The Project Manager has a continuous leadership role across all stages of the project. From the beginning to the end, it's critical to set the course for the project, pull together the team and establish communication lines and methods for the life of the project. All phases require alertness to ensure the team functions are in line with the project mission and goals, and to ensure effective communication between the entire project team, including outside stakeholders.

The overall objective of the Project Manager and every team member is a successful project, but each must respect their counterparts' unique organizational responsibilities.

THE PROJECT MANAGER HAS THE RESPONSIBILITY TO:

- Manage the overall process.
 - > Individual aspects and tasks are delegated to appropriate team members (see the UDOT Project Delivery Network for additional information).
- Provide continuity of project knowledge and history throughout all project phases and convey project knowledge to other teams and projects.
- Maintain the mile-high view and continually communicate the big picture to the project team.
- · Set the tone and tempo of the project with the appropriate attitude and communication.



All team members play a role in ensuring scope, schedule, budget and quality standards of a project are met. A project cannot be successful without the full engagement, insight and knowledge of each team member. Effective teamwork is just as important as effective team leadership.

EVERY TEAM MEMBER HAS THE RESPONSIBILITY TO:

- Stay involved in the process.
- Attend and participate in all required meetings.
- Read any and all communication that is received about the project.
- Complete assigned tasks.
- Keep the Project Manager and other team members up to date on progress and pertinent information discovered.
- Inform the team of information specific to the project area.

This guide provides specific tools and tips to aid the project team members in each area of responsibility. Although the language is directed to the Project Manager, the information is also useful for technical specialists and all team members. Links to further information on the UDOT website and Internet are provided within this document. Additionally, links to other sections of the document, as shown in highlighted text, are provided to quickly access definitions, sample documents and other tools relative to the highlighted words.

KEY 1:

Building & Uniting a Team



"Coming together is a beginning. Keeping together is progress. Working together is success."

-Henry Ford

If a chain is only as strong as its weakest link, then a team is only as strong as its weakest member. That doesn't mean that every individual on the team needs to have great responsibilities or be a team leader. They need to understand what their role is, be empowered to make decisions and be able to trust you and their fellow team members. With these elements in place, your team dramatically increases their odds of working well together to successfully complete the project.

Another element of project success depends on having all available knowledge included in project discussions and decisions. The Project Manager is responsible for ensuring the necessary technical and political areas are represented by the project team.

Assemble and Join the Team

When assembling a team, it is important to remember that all team members are critical, no matter how short or small their involvement is in the project scope. While your first inclination may be to assemble a team of like-minded individuals, seeking a diversity of backgrounds, personalities and styles in core team members has actually been proven to enhance innovation and creativity of solutions. Studies have even shown that diversity trumps ability.

The following Team Formation Checklist will help ensure that all appropriate team members are included.

INTERNAL TEAM MEMBERS	EXTERNAL TEAM MEMBERS		
☐ Design	☐ Association of General Contractors		
☐ Environmental	☐ Bureau of Indian Affairs		
☐ Geotechnical	☐ Bureau of Land Management		
☐ Hydraulics	☐ Bureau of Reclamation		
☐ Innovative Contracting	☐ Business Owners		
□ ITS/ATMS	☐ City		
☐ Landscape Architecture/Aesthetics	☐ County		
☐ Maintenance	☐ Division of Motor Carriers (Ports of Entry)		
☐ Materials	☐ Environmental Protection Agency		
☐ Pavement Engineer	☐ FHWA		
☐ Planning - Bicycle Coordinator	☐ Indian Nations		
☐ Planning and Programming -	☐ Irrigation Companies		
Region Transition Contact	☐ Law Enforcement		
☐ Project Development Leadership	☐ Legislators		
☐ Project Management	☐ Local Emergency Services		
☐ Project Sponsor	☐ Metropolitan Planning Organization		
☐ Public Involvement	☐ National Park Service		
☐ Region District Engineer	☐ Private Property Owners		
☐ Resident Engineer	☐ Railroads		
☐ Right of Way	☐ State Department of Environmental Quality		
☐ Roadway	☐ State Historic Preservation Office		
☐ Structures	☐ State Land Board		
☐ Survey and Mapping	☐ State Parks and Recreation		
☐ Traffic and Safety	☐ U.S. Fish and Wildlife		
☐ Utilities	☐ U.S. Natural Resources Conservation		
	☐ USDA - Forest Service		
	☐ Utah Transit Authority		
	☐ Utah Travel Council		
	☐ Utility Companies		

Identify Team Mission and Goals

"To authoritatively set a clear, engaging direction for a team, is to empower, not depower, it."

-J. Richard Hackman, Harvard University

A clear team mission that gives team members a sense of what the outcome of their work should be is essential for project success. Setting goals based on the mission will empower every team member and provide a yardstick to measure the team's performance and progress.

TO ESTABLISH A PROJECT THAT IS CLEARLY DEFINED:

- Develop a clear vision that includes its position in the broader transportation system.
- > Define the project vision with a clear outcome, urgency level required and clear beginning and ending points.
- > Consider all modes of transportation and end users—the ultimate customers for whom the project is being developed—in the project vision, goals and purpose and need.
- Verify, refine and communicate the purpose and need for the project.
- Use the **ePM** system to set up and track the project.
- Use the Project Definition Document (PDD) to further define the project objectives and capture
 essential data.

WHEN SETTING PROJECT GOALS:

- Include specific performance objectives, expressed concisely so that all team members and stakeholders will know when they are met.
- > For example: "Improve intersection safety by adding a turn lane" or "Open all lanes of traffic without restrictions by Thanksgiving."
- Ensure that set goals are realistic.
- Develop a schedule and task delegation plan to facilitate reaching the goals.
- Refine existing goals and set additional goals to fulfill the team mission.
- Prioritize goals to assist team members in managing multiple priorities.
- Define and communicate the role and responsibilities of each team member in relation to the project mission and goals.

ONCE THE PROJECT IS CLEARLY DEFINED:

- Communicate the vision of the project, including its relationship to the UDOT mission, to other projects and to key stakeholder goals.
- Review and re-communicate the project vision and goals during every project stage.
- Notice risks and immediately take action.

Clear Roles and Responsibilities

Clearly defining roles and responsibilities at the beginning of a project will help alleviate confusion, frustration and duplication of work, and will help ensure that all tasks are covered and nothing is overlooked. It is the team leader's responsibility to make the various assignments based on abilities, workloads and any other determining factors. The team leader should also **delegate** and empower the individual team members to make decisions that fall within their defined role and responsibility.

RESPONSIBILITIES FOR THE PROJECT MANAGER ARE DEFINED AS:

- Oversees overall scope, schedule, budget and quality.
- Select Design Leader in consultation with Functional Managers.
- Provide continuity of project knowledge and history throughout all project phases.
- Responsible for securing necessary resources through collaboration with design and discipline leaders.
- Administer contracts for consultant projects.
- Serve as a resource to design and discipline leaders to resolve team problems and conflicts.
- · Act as project coordinator with the public, third parties, property owners, etc.

ROLE: The title or position that each member will hold on the project team (i.e. Hydraulic Engineer or Environmental Technical Specialist).

RESPONSIBILITY: The expectations and work products required from the team member.

- Includes project deliverables expected from the team member and the scope of work they will accomplish.
- Includes interaction with other team members and attendance at meetings or other events.
- Defines decisions they will make or for which they will provide input.

After making assignments, clearly communicate the breadth and limits of each member's role and responsibilities to each individual and the team. To ensure that communication has been clear, ask each member to define their project role and responsibilities, as they understand them, being as specific as possible. It may be helpful to develop a **decision tree** to clarify individual responsibility and authority to make project decisions.

THE DECISION TREE

The decision tree is a useful method of delegation and effective decision-making that is discussed in *Fierce Conversations* by Susan Scott. The basic philosophy can be summed up as follows:

A project and organization is considered a green and growing tree that bears fruit. Countless decisions are made daily, weekly and monthly to ensure its ongoing health. Each person on the project and in the organization has a history of making good decisions in certain areas. These histories of good decision-making are known as leaf-level decisions, and because of their history, team members can make and act on these decisions without the knowledge or approval of a supervisor or Project Manager. The goal of a supervisor and Project Manager then becomes to move more decisions out to the leaf level for each person. The number of leaf-level decisions an individual has is an indication of the progress they are making in their development.



THE FOUR CATEGORIES OF DECISIONS:

Leaf Decisions: Make the decision. Act on it. Do not report the action taken.

Branch Decisions: Make the decisions. Act on it. Report the action taken on a daily, weekly or monthly basis.

Trunk Decisions: Make the decisions. Report the decisions before taking action.

Root Decisions: Make the decisions jointly, with input from many people. These are the decisions that, if poorly made and implemented, could cause major harm to the project or organization.

The analogy of root, trunk, branch and leaf decisions indicates the degree of potential harm or good to the organization an action can make. A trunk decision isn't necessarily more important than a leaf decision. Poor decisions at any level can hurt an organization, but if a leaf is unwittingly yanked off a tree, the tree won't die. A leaf decision will not kill the tree if it is poorly made and executed. A wrong action at the root level, however, can cause tremendous damage.

THE GOAL OF THE DECISION TREE IS THREEFOLD:

- 1) To identify clearly which categories decisions and actions fall into, so a team member knows exactly where he or she has the authority to make decisions and take action.
- 2) To provide team members with a clear upward path of professional development. Progress is made when decisions are moved from root to trunk to branch to leaf.
- 3) To assist organizations in consciously developing baseline leadership, freeing up executives to take on more challenging responsibilities.

THE QUESTIONS OFFERED BY LESLIE YERKES IN HER BOOK, HOW TO DO THE RIGHT THING, CAN ALSO ASSIST TEAM MEMBERS IN MAKING DECISIONS.

- Does it pursue the mission?
- Is it congruent with our organization's values?
- Does it ensure quality?
- · Is it being delivered with a service conscience and does it serve our stakeholders?
- Is it fiscally responsible?

Develop Trust

A high-performing team is built on a foundation of trust and respect. When team members trust each other, they are more willing to share the workload and create an open and productive environment.

WAYS TO DEVELOP TRUST WITHIN A TEAM:

- Model trust and respect at all times with all team members and stakeholders.
- Provide feedback to team members on their performance to be perceived as fair and trustworthy.
- Build trust quickly through clear communication and identifying team members with expertise to complete the project elements.
- Build trust early by clearly communicating project goals and the reason why each team member is on the team.
- Be transparent by telling the truth (even if painful) and acting consistently.

- Keep commitments and trust others to keep theirs.
- > Prepare in advance for meetings to convey reliability and enhance trust.
- Set ground rules for how the team will communicate and accomplish project goals.
 - > Share the responsibility for enforcing the ground rules with the entire project team after they are identified.
- Ensure team members understand each other's skills to "Make Your Good Team Great."
- Communicate reasoning behind decisions to all team members to enhance trust and understanding of decisions.



EXAMPLES OF TEAM GROUND RULES:

- We will keep a sense of humor.
- All ideas will count and be heard.
- We will respect each other.
- We value constructive feedback.
- We will celebrate team accomplishments.
- We will not have side conversations during team meetings.

Summary

Properly organizing and uniting a team is a crucial step in the success of any project. Start with the right people and give them a clear understanding of the project goals and their role in reaching them.

Then empower each team member to make necessary decisions and move forward in their role. Doing so

will lead to a team that is more invested in the process and to a better project outcome.

KEY 2:

Managing the Team's Time



"A project gets to be a year late, one day at a time."

-Author Unknown

It's not about how many hours you have; it's about what you do with those hours.

Advanced planning will help you to make the most of your team's time and will encourage them to use their time wisely. It is imperative that team members meet their deadlines to support the overall project schedule.

Effective Scheduling

Effective scheduling involves setting interim and internal deadlines to help team members understand how their assigned tasks fit into the overall project schedule. Communicate clearly the critical path items and the impact any failure to meet interim deadlines will have on others and the overall schedule.

TIP: FOR EFFECTIVE SCHEDULING:

- · Realistically assess staff availability.
- · Calibrate your optimism and build contingency plans.
- · Set and monitor internal and intermediate deadlines.
- · Closely track critical path items.
- Develop contingency recovery plans.
- · Celebrate incremental successes.
- · Review scheduled deadlines at every project meeting.

Time Management

Instill a sense of urgency in your team members by regularly reviewing upcoming deadlines and tasks needed to meet them. Ensure that all team members know everyone depends on them to accomplish their tasks for the project to be successful. Help your team manage their time by holding effective meetings, and by teaching them to make decisions quickly with as little information as possible for the needed level of accuracy. Being a wise steward of time will help the project stay on schedule.

ROLES AND RESPONSIBILITIES TO CONSIDER:

- · Project Managers are responsible to organize and manage all core meetings, including team meetings and milestone meetings.
- Technical Discipline Leads are responsible to coordinate technical discipline meetings.

USE MEETING TIME EFFECTIVELY:

- Set a regular date, time and place for team meetings to help team members organize their time and priorities.
- Start and end on schedule to show respect for team members' time.
- Prepare an agenda and follow it.
- Schedule time in early team meetings for members to share work progress and successes.

- Review action items.
- Conduct a past week schedule review and a two-week schedule forecast.

TIP: MANAGE YOUR TIME LIKE YOU WOULD MONEY.

There are 36,000 seconds in every workday. If you were given a check today for \$36,000, how would you prioritize and spend the money? Prioritize your workday with the same thought and focus.

• Document the meeting adequately to note decisions, action items and assignment responsibilities.

- · Keep the meeting minutes concise and promptly send them to all team members.
- Ensure the appropriate people attend to enable effective decision-making.
- Keep attention focused on the meeting.
- > Turn off cell phones.
- > Stop side conversations.

TIP: PROGRESS SHARING MAKES MORE EFFICIENT TEAMS.

Research of successful teams within UDOT revealed that teams are more efficient when team members know each other. Use work progress sharing to help team members get to know each other.

Delegation

It's often easier to do a job yourself than to take the time to teach someone else to do it. While delegation isn't always the easiest method in the beginning, effective delegation will help strengthen the team and organization by teaching others valuable skills through on-the-job training. Learning to delegate properly will also increase your value to the organization, as those who can keep several others busy by using good delegation practices are more valuable than those who cannot. But don't be fooled, delegation is not abdication; it requires you to clearly communicate your expectations and then follow up regularly.

TIP: FOR EFFECTIVE DELEGATION:

- Give all the facts you have about the assignment and remain accessible for questions and reports.
- Establish what needs to be done and leave the means up to the delegate.
- Verify understanding of instructions by having the person give a summary of what they heard and the next actions they will take—check it out.
- Require interim reports or check points.
- Don't immediately answer all questions, but do help think through the issue.
- Give authority with responsibility.
- Establish realistic goals.
- Allow mistakes.
- Follow up, but don't micromanage.

Summary

While it is necessary for the project manager to establish deadlines to meet the project schedule, it is just as crucial that team members know those deadlines and are capable of meeting them. Adequately staffing a project, communicating deadlines and distributing workloads will help a project to remain on course, on time and on budget.

KEY 3:

Communicating & **Collaborating Effectively**



"A compelling vision, based on clear goals and expectations, is only as effective as the communications strategy put in place to support it."

-Paul Michelman

Determining how, when and what you will communicate cultivates a working environment where individuals feel included, informed and empowered to perform their responsibilities. A clear communication plan will also help teams recognize and solve problems as they arise, and avoid duplication of work. Most importantly, effective communication, where team members regularly discuss the progress and direction of the project, will ensure that everyone is on track, working toward the same goals and has the opportunity to provide input—which will ultimately result in a project that meets and even exceeds expectations.

Plan Your Communication

As you assemble the project team, set clear expectations regarding communication from the beginning. These will vary depending on the scope of your project and the situations, locations and needs of the team members. Hold a project **kick-off meeting** to discuss these expectations with the entire team.

Milestone meetings throughout the project provide opportunities to reinforce expectations and provide consistent communication. Factors to consider in planning communication:

• HOW LONG DO YOU HAVE TO COMPLETE THE PROJECT?

The project timeline will help you determine how often you need to meet. A project with a long timeline may only require occasional meetings after the kick-off and more frequent meetings as milestones approach. On the other hand, projects with short timelines may require more frequent meetings.



WHERE ARE THE TEAM MEMBERS LOCATED AND WHAT ARE THEIR SCHEDULES LIKE?

If team members are located within an easy distance of one another and have flexible schedules, face-to-face meetings may be appropriate. If time or distance is prohibitive, teleconferences, online meetings or email reports may be more practical communication methods.

WHEN HOLDING A MEETING, WHAT DO YOU WANT IT TO ACCOMPLISH?

In order to make your group time most effective, establish an agenda for each meeting and send it out to the group before each meeting. By doing so, team members will be able to come to the meeting prepared with the needed information. At the end of the meeting, review any assignments made and make additional assignments as needed.

WHAT ARE THE NEEDS FOR COMMUNICATION BETWEEN MEETINGS?

Determine if there is a need for the team to communicate between meetings. If there is, establish times and mediums (i.e. a status update email every Tuesday) for this communication to take place.

WILL TEAM MEMBERS BE WORKING INDIVIDUALLY OR COLLABORATIVELY?

Even when team members are working individually, it often happens that the work of one interlaces with the work of another. It is important to establish and communicate deadlines to the team and outline how information will be transmitted between team members. If people will be working in smaller groups within the team, make sure that they understand the end result they need to produce.

KICK-OFF MEETING

- Invite all team members to the kick-off meeting, no matter how small or specialized their expected role on the project is.
- Make sure that each team member understands the project vision and goals.
- Align the project vision and goals to the UDOT Final Four, responsible stewardship of funds and project fit within the surrounding transportation system.
- Inform the team of the project communication plan, including meeting frequency, milestone dates and the final completion deadline.
- · Communicate critical path items and interdependence of tasks to meet schedule dates.
- · Ensure that everyone is aware of their role and the roles of the other team members.

MILESTONE MEETINGS

- Ensure that all team members are aware of their responsibilities for the meetings.
 - > Emphasize the expectation for each team member to review the available documents prior to arriving at the meeting.
 - > Each team member is accountable to the team for representing the needs and concerns of their technical area and expertise.
- > Each team member is responsible to provide feedback to maintain the project schedule, scope and budget.
- Repeat vision and goals as needed to keep the team focused and action oriented.
- Review assignments and action items from previous meetings and model accountability for completing tasks.
- Discuss innovative possibilities for tasks and processes.

Communicate Clearly

Whether in a scheduled team meeting, on a phone call or in an email, clearly communicating with the team is key. Whether you're the team leader or a team member, it is your job to ensure that all communication is clear, constructive and honest. It is the team leader's job to communicate and manage the big picture to help team members balance multiple and sometimes conflicting objectives and priorities.



WHEN SEEKING TO COMMUNICATE CLEARLY:

- Communicate decisions and reasons for decisions to all team members in a timely manner to model transparency.
- Use the communication tool appropriate for the message.
 - > Email for quick messages and reports.
 - > Phone calls when immediate responses are needed, or clarification is required.
 - > Conference calls when several people need to be involved in the decision or need to hear the message.
 - > Personal visits for feedback, acknowledgement, critical information or potentially confusing information.

- Communicate with team members appropriate to the development stage of the team using the Team Development Graphs.
- Use the "Know, Feel, Do" method.
 - > What do I want them to know, understand, learn or question?
 - > How do I want them to feel?
 - > What do I want them to do as a result of my communication?
- Repeat vision and goals as needed to keep the team focused and action oriented.
- Reinforce where the project fits into the UDOT funding cycle and program scheduling.

- Schedule and hold regular team meetings to share progress, new information and changes.
 - > Organize meetings with agendas that result in action items.
 - > Inform team members of the agenda prior to the meeting and emphasize expectations for team members' preparation.

- >> Each team member is expected to review the available documents prior to arriving at the meeting.
- >> Each team member is accountable to the team for representing the needs and concerns of their technical area and expertise.
- >> Each team member is responsible to provide feedback at milestones and other appropriate times to maintain the project schedule, scope and budget.
- Facilitate ongoing discussions of member and stakeholder expectations to help ensure they are known and are met.
- Ask the right questions and listen for the answers.
 - > Ensure clear communication using active listening techniques.
- Provide timely and appropriate feedback to all team members.

TIP: FOR GIVING EFFECTIVE FEEDBACK:

- > Provide feedback when the person is doing something right.
- > "No news is good news" does not work for everyone.
- > Use the person's name and make eye contact so you have their full attention.
- > Provide feedback in person, whenever possible.
- > Do not give feedback when you are mad.
- > Take a moment before you speak or write to ensure understanding.
- > Be as specific as possible using recent examples.
- > Pay attention to non-verbal cues and make sure your non-verbal cues are consistent with your verbal message.
- > Determine if the person is open to feedback at the time you are ready to provide it.
- > Focus on the behavior, not the person.
- > Make sure it is something they can change.
- > Do not expect them to change their personality.
- > Make sure they understand your feedback.
- > Have them repeat what they heard in their own words—check it out.

Active Listening

Listening to others is almost becoming a lost art. With so many people seeking to convey their own thoughts and opinions, hearing and understanding is often underrated. If you learn how to practice active listening, you will gain greater respect among your peers and will be a better Project Manager and contributor.

Active listening is about more than simply hearing the words someone is saying. When you are actively listening, you are hearing, understanding and interacting with another person. In short, it is the foundational element of effective communication.

TEN PRACTICES FOR ACTIVE LISTENING INCLUDE:

- 1) Stop talking—to others and to yourself. Turn down the voices in your head and really listen to the speaker.
- 2) Suspend the need to prepare a response or tell your own story.
- 3) Suspend judgment about the message and/or the speaker.
- 4) Resist distractions—silence email and phone, close your door.
- 5) Let the whole message from the speaker resonate before formulating a response by pausing two seconds before responding.
- 6) Speak only affirmatively while listening. Let the speaker know you are listening with body language and affirming short words, not interruptions, just affirmations.
- 7) Watch and listen for the emotion behind the words, such as anger, excitement or boredom, which will deepen your understanding of the message.
- 8) When in doubt, check it out.
 - Do not hesitate to ask the speaker to repeat or clarify.
 - Asking questions shows that you are listening and care about the message of the speaker.
 - Clarifying questions will ensure true understanding by all parties.
- 9) Show continued interest in the speaker or terminate the conversation.
 - Non-interest will be relayed by your body language and verbal cues.
 - If you cannot stay present with the conversation, ask that it be continued at a time when you can really listen.
- 10) Maintain solid eye contact to show you are truly listening. Eye contact shows interest and presence, but be careful not to stare.

Collaborate

One of the biggest benefits of working in a team is the opportunity it provides for collaboration. When a team **collaborates**, all team members work together to achieve success as defined by the project mission and goals. The exercise of hearing different viewpoints and discussing various approaches often stimulates thoughts and ideas that a single individual would not have had. In the end, a project that includes collaboration typically results in a better project.

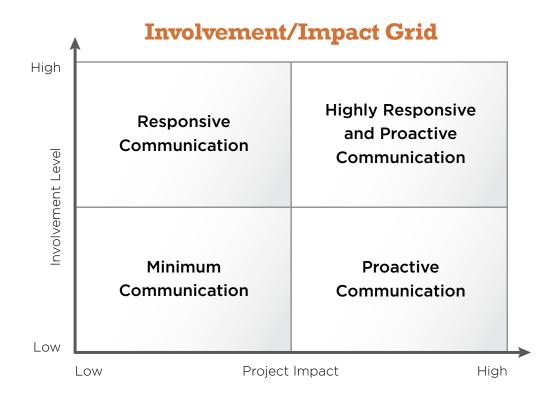
TO ESTABLISH A COLLABORATIVE ENVIRONMENT:

- Encourage team members to contribute to finalizing the project goals and developing the process to accomplish the goals during the project setup.
- Give the team responsibility and ownership of the goals by allowing them to influence the process by which the goals will be achieved.
- Involve team members in organizing the project schedule and setting interim deadlines.
- Turn your group into a team.
- Encourage creativity.
- Collaborate with the Design Leader to ensure responsibilities are clear for each person.

- Acknowledge and consider input from all team members.
- Facilitate risk taking by accepting failures as a learning experience with no negative ramifications to team members.
- When issues arise, seek to understand the problem by listening objectively without making it personal and seek solutions without blame.
- Delegate to team members work that is in their area of ability and expertise. Project Managers will improve decision-making and responsiveness of their team by delegating appropriately.
- Develop a communication strategy for each level and type of team member.



- · Use an involvement/impact grid to group stakeholders that are not involved in the daily work of the project team.
 - > Group the stakeholders based on their level of active involvement in the project and their ability to impact the project's execution.
 - > Assign each stakeholder to a grid location and develop an appropriate communication strategy for each box of the grid.



GRID INSTRUCTIONS:

Plot each stakeholder in grid. Communicate results to all team members.

STAKEHOLDERS LIST:

А	
В	
С	
D	
Ε	
F	

COMMUNICATION INVOLVEMENT:

- Minimum Communication involves the lowest level of participation such as scheduled emails or a newsletter.
- Responsive Communication requires response to requests within an agreed upon timeframe to avoid major issues.
- Proactive Communication requires preemptive outreach for all decisions that impact the project or stakeholders' interests.
- Highly Responsive and Proactive Communication requires full engagement of the stakeholderscommunicating regularly regarding project decisions and progress and responding quickly to any requests.

EFFECTIVE COMMUNICATION STARTS WITH PLANNING

Another crucial element of managing a project involves communicating the appropriate amount of information with the various project stakeholders. Good communication doesn't happen by chance, but is the result of careful planning. The <code>involvement/impact grid</code> will help you put together a communications strategy by determining the stakeholder's level of investment. From there, you can select appropriate methods to reach the stakeholders and keep them informed.



It is important to understand that some stakeholders need more information than others, and not everyone will respond to the same method of communication. Determine the appropriate tool to use, whether it be email, fact sheets, website, phone calls, or face-to-face contact, and how much information to distribute. Most importantly, get your team involved. Effective communication takes the entire team to actively manage it. The key is to prepare for a variety of situations and be ready to distribute the information as needed.

Seamless Transitions

As the project moves from one phase to the next, valuable information is often lost. All team members are responsible for documenting decisions and conveying that information to new team members as the project progresses from scoping through construction.

THE FOLLOWING INFORMATION WILL NEED TO BE COMMUNICATED AT VARIOUS TIMES OF TRANSITION:

- Document decisions to establish a complete project history and record for project leadership transitions and senior leadership communication.
- Convey to the construction team the commitments that were made during the design phase, including environmental, right of way, utilities, work restrictions with the city and work restrictions related to other sensitive areas.
- Convey to Maintenance Operations information for items such as environmental commitments, landscaping, signal and lighting systems, paint warrantees and maintenance requirements or work restrictions of environmentally sensitive areas prior to closeout of final documents.
- Use the **Project Definition Document** developed during project setup to convey key project information to new team members.

TIP: SEAMLESS TRANSITIONS START WITH GOOD RECORD KEEPING.

Use the **ePM** Project Commitments and Comments Screens and the Project Definition Document (PDD) to log, track and report commitments and decisions.



Effective Negotiation

As your team presents ideas and prepares to implement them, there will often be a negotiation process that takes place. Learning effective negotiation skills can help to achieve the best outcome possible for the team, and ultimately for UDOT.

TEN STEPS FOR SUCCESSFUL NEGOTIATION PREPARATION:

- 1) Develop a problem-solving attitude.
- 2) Research and seek the advice of Technical Specialists if negotiating unfamiliar technical topics.
- 3) List UDOT's interests and list the other party's interests.
- 4) List UDOT's key issues in order of importance.
- 5) List the other party's key issues in order of importance.
- 6) Develop a UDOT best outcome.
- 7) Develop a best outcome for the other party.
- 8) Draft your selling points to the other party.
- 9) Practice negotiating key issues and discuss with peers.
- 10) Schedule a session with key participants.

TIP: IF NEGOTIATIONS REACH AN IMPASSE:

- · Ask for a brief recess.
- Move on to another issue.
- Use humor.
- Change negotiators/team make-up.
- Agree on a piece of the issue.
- · Ask for clarification of the root issue.

Summary

Communicating effectively doesn't happen overnight. Instead, it requires planning and most importantly, practice. Establish a model for proper communication at the beginning of the project and then follow, and remind team members to follow, that process throughout the life of the project. Be conscious of the effectiveness of the communication that is taking place and make adjustments as needed. Most of all, recognize that everyone can improve their communication skills, and look for opportunities to do so within the team environment.

KEY 4:

Maintaining Momentum



"Success comes from progressive movement toward your goal."

-American Heart Association

No team can be expected to charge full speed ahead from day one. You should always allow a little leeway in the beginning of your schedule for the team to get up and running. However, once the team has reached its momentum pace, you will want to do everything possible to ensure that it maintains that speed. This involves everything from anticipating and accepting change, to keeping the team motivated, resolving conflict and offering appropriate levels of help as needed.

Communicate and Accept Change Swiftly

"There is nothing permanent except change."

- Heraclitus

No matter how much planning goes into a project, changes and unexpected circumstances always arise. Although many changes cannot be anticipated, communicating them fully in a timely manner affords the team the opportunity to adjust to and accommodate the change.

WHEN TEAM MEMBERS CHANGE:

- Communicate key project decisions and current project status to new team members.
- Clearly communicate the roles and responsibilities of each team member.
- · Convey project mission and goals.

WHEN CIRCUMSTANCES CHANGE:

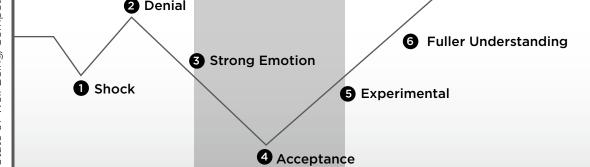
- Make advance plans for changes and scheduled project milestones.
- · Use the Project Definition Document (PDD) and communicate decisions and reasoning for changes to maintain project knowledge continuity.
- When appropriate, include team members in the development of response to changes.
- > Be open to ideas from a diverse group of team members.

PREPARE FOR RESPONSES TO CHANGE:

- Understand the stages of change from shock to integration.
- · Acknowledge the need for team members to move through the stages of change for each change in project direction while leading a swift team response.
- > Set a time frame for team members to vent.
- > Support and encourage team members to quickly move to developing actions and schedules for the project change.

State of Well Being/Competence Frustration -Integration 2 Denial 3 Strong Emotion

Change Transition



Time

Encourage Innovation

UDOT depends on innovation to meet our four strategic goals and the transportation demands of the state. Every project team is responsible for considering and developing innovative methods of completing their project. This includes project management, technical areas, contracting and processes.

WAYS TO ENCOURAGE INNOVATION WITHIN YOUR TEAM:

- · Ask every team member, including the project management, how they are incorporating innovation into their area of project responsibility.
- > Review innovations and possibilities at every meeting in areas such as design, schedule, process or construction.
- Ask team members to consider areas and tasks that frustrate them and brainstorm ideas for a new approach or process.
- > Clearly define the problem.
- > Write all ideas where they are visible to the brainstorming group.
- > Encourage building on each other's ideas.
- > Allow wild ideas, you never know where they may lead.
- Consider Innovative Contracting before deciding the project delivery method.
- Be your team's Chief Innovation Officer.
- Encourage the sort of innovative thinking that can add value in a myriad of ways.

Recognize and Appreciate Good Work

A big part of being a good leader is learning how to keep your team motivated. Recognizing team members for their efforts goes a long way in keeping them motivated and performing at top levels. When a team member feels that the work they are doing is being seen and appreciated, they are more likely to continue to produce good work. Calling attention to project milestones and the successful completion of assignments by team members helps to boost morale and keep people motivated and engaged to maintain project momentum.



YOU CAN RECOGNIZE AND APPRECIATE GOOD WORK BY:

- Announcing team member's accomplishments in meetings or status updates.
- Offering one-on-one performance feedback.
- Thanking team members for a job well done.
- Giving highly valued individuals more independence in performing their responsibilities.
- · Increasing responsibility.

WHEN SEEKING TO HIGHLIGHT ACCOMPLISHMENTS:

- Acknowledge and celebrate team members in person, sincerely and at the time of achievement.
- Acknowledge and reward team members that communicate changing circumstances, new information or potential risks.
- Express appreciation for the extra effort of team members.
- Acknowledge desirable actions and results of individual team members and the team.
- Pass on praise received from others to team members immediately.
- Acknowledge team members contributions to enhance their confidence and encourage them to acknowledge others.

TIP: SUGGESTIONS FOR CELEBRATING AND ACKNOWLEDGING TEAM MEMBERS:

- Acknowledge individual and team accomplishments during team meetings.
- Deliver a personal note of thanks for members who accomplish their assignments.
- Encourage team members to "high five" each other.
- Acknowledge a team member or sub-team during a full team meeting and encourage people to clap in appreciation.
- Arrange a special gathering to celebrate milestone accomplishments.

Coach and Counsel

The Project Manager's responsibility is to lead the team and to give each team member the ability to succeed. This means that throughout the project you will take on multiple roles. Practicing **9,9 Leadership** skills will help you no matter what role you are filling. Below you'll find some of the roles that you may be required to step into, as well as some tips for succeeding in any position.

TEAM REFEREE

- Support healthy conflict.
- Bring all team knowledge and opinions to the surface.
- Know when the conflicts cross the line and resolve them as quickly as possible.

TEAM CHEERLEADER

- Support team members to increase their confidence and expertise in the area of their responsibility by using appropriate leadership strategies.
- Address team member performance issues immediately to help them succeed on current and future teams.
- Understand the level of confidence and expertise each team member has to complete their project role and know how to offer encouragement according to their learning style and personality type.

TEAM DOCTOR

- Ensure that your team is healthy to help the project progress smoothly.
- Use preventative measures like supporting team diversity.
- Encourage open communication and sharing of ideas.
- Set and conduct team health checkups regularly, at least quarterly, using team-developed metrics.

Modify the **Team Health Checklist** for your project needs using the **Partnering Tool** for reference.

TEAM HEALTH CHECKLIST:

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☐ What can we improve?

 \square Are roles and responsibilities clear?

☐ What clarification would be helpful?

 \square Are we meeting milestone goals?

 \square What communication flow is going well?

☐ How can we improve communication?

As you lead your team, use **Situational Leadership** skills, to offer the appropriate level of help to each team member based on your relationship to and knowledge of individual team member competency.

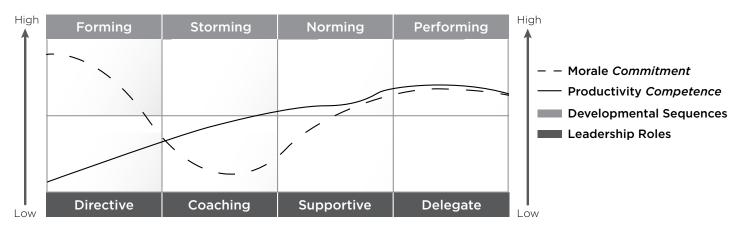
Situational Leadership



Use the **Team Development Graph** to determine the appropriate leadership style to use as the team

Stages of Team Development

forms and develops through the life of the project.



Reference UDOT Leadership Institute materials provided by DeCoster.

IN DEVELOPMENTAL SEQUENCE IN SMALL GROUPS, BRUCE W. TUCKMAN DEFINES FORMING, STORMING, NORMING AND PERFORMING AS:

- **FORMING:** Individuals are gathering information and impressions about each other and the scope of the tasks. Although a comfortable stage, the avoidance of conflict means that productivity is low despite high morale. Directive leadership is best for this stage.
- **STORMING:** Minor confrontations will arise that are quickly dealt with, yet conflict may be suppressed. To deal with conflict, individuals will look for structural clarity and rules to prevent it. Morale is at a low point, but productivity is increasing. As group member roles and responsibilities become clearer, a coaching style of leadership is appropriate.
- **NORMING:** The group's tasks or responsibilities are clear and Individuals listen to each other, and are prepared to change pre-conceived views. Individuals have had to work hard to attain this stage and may resist any pressure to change—especially from the outside. Morale has increased sharply and productivity continues to improve. The group leader is best in a supportive role in this stage.
- **PERFORMING:** Characterized by a state of interdependence and flexibility—everyone knows each other well and trusts each other enough to allow independent activity. Group identity, loyalty and morale are all high, and everyone is equally task-oriented and people-oriented. Productivity is high and the group leader can delegate work to all group members.

Summary

Maintaining a team's enthusiasm and momentum for a project is critical for success. Changes, conflicts and other setbacks can all create frustration and lead to a loss of drive. Recognizing and removing roadblocks as quickly as possible and appreciating accomplishments along the way will help the team continue to move forward at a steady pace while feeling a sense of accomplishment for the work that is being done.

KEY 5:

Mitigating Risks & Surprises



"A little risk management saves a lot of fan cleaning."

-Unknown author

Every project comes with inherent risks, and no project is without its surprises. Learning to navigate these areas before and after they arise will minimize delays and promote a better end product.

Identify and Manage Risk

Failed projects show that the Project Manager was frequently unaware of the big hammer that was about to hit the project. Often someone on the team saw the hammer coming but didn't inform the Project Manager of its existence. This can be prevented by consistently including risk communication in your team meetings. Doing so will show that risk is important and will give the team a "natural moment" to discuss and report any new risks. The Project Manager's role is to create an environment that is open for honest communication from all team members. Then it is up to them to decide when it is appropriate to take risks.

Each team member has the responsibility to identify the project **risk elements** within their area of expertise. They are responsible to ensure that their activities follow UDOT policy and procedures and that variances are well documented.



There may be times when you facilitate what is deemed to be a worthwhile risk by accepting failures as learning experiences with no negative ramifications to team members. Before making such a decision, use the "Risk Tracking and Analysis Tool for Small and Medium Projects" to develop a risk assessment plan that identifies, evaluates, tracks and manages the potential impact of all risk factors raised by team members. If you decide to proceed with the risk, document all project decisions, especially those related to design exceptions and variances from UDOT policies and accepted practices.

Risk Factors

The benefits of managing project risk are significant. If you deal with uncertain project events in a proactive manner, you minimize the impact of project threats and seize the potential for opportunities. Your team is more effective and much happier if they can avoid "fire fighting" to repair the failures that could have been prevented.

Not all risks are foreseeable, but most have warning signs. Watch for deadlines that are met, but just barely. This may mean that the team member(s) is overcommitted or unsure of their responsibility. You may also be cautious if the budget of every task is full, as this could indicate that the team member(s) is not working efficiently. Identifying these risks early on will help you correct them before they lead the project to failure.

TIP: THINK ABOUT POSSIBLE RISKS AHEAD OF TIME.

A "Sample Risk List" can be found in the "Risk Tracking and Analysis Tool for Small and Medium Projects," and will help you in developing a list of potential project risks. FHWA also has a comprehensive list of risks to consider.

Sometimes external forces are what prove to be a problem. Ensure progress in the face of these potential slowdowns by asking specific questions such as:

- When will specific tasks be completed?
- What progress has been made since our last meeting?
- · What client activities are to be accomplished and what is the status of each one?

Build Quality into the Project

"The quality of expectations determines the quality of our action."

-A. Godin

Every member of the project team is responsible for incorporating quality into each step of their work. Building quality into every project will achieve the UDOT mission of "Quality Transportation Today, Better Transportation Tomorrow." As the Project Manager, you set the expectations for quality and ensure that the documentation and procedures are completed. As a team member, you work toward meeting those expectations. Quality control is the step incorporated at every stage in the project development process to ensure project standards are met.

Quality Documentation

The UDOT Quality Control/Quality Assurance (QC/QA) Procedures assist the project team in creating designs that are safe, economical, constructible, maintainable, aesthetic and appropriate for the project location and surroundings. The project team is responsible for implementing the QC/QA Procedures in all aspects of project development including design, plans, reports and estimates. The Procedures are required and help the project team verify that the design and project documents are produced with due diligence through the use of acceptable industry standards, appropriate techniques, available resources and reasonable decisions by competent professionals. That being said, the Procedures are a tool and cannot be expected to replace the sound judgment and experience of those competent professionals.

FOLLOWING ARE SOME COMMON AREAS TO WATCH FOR AND LEARN FROM:

- Design oversight (QC/QA overlooked)
- Environmental, right of way or other commitments not incorporated
- Product changes
- Unknown existing conditions (utility, geotechnical, increased deterioration of a facility, etc.)

- Poor coordination with other divisions, agencies and/or third parties such as utilities
- Changes in project sponsor requirements (scope, schedule, adjacent contracts, etc.)
- Improvement suggestions and Contractor
 Value Engineering
- Completely unforeseen conditions or events

Documenting decisions and project processes is the best way to mitigate risks and avoid surprises. Because each project is unique, the project team can modify the QC/QA procedures as necessary to reflect the distinct aspects or specific requirements of the project. As the Project Manager, you are responsible for reviewing and signing off on any modified or alternate QC/QA plans. Checklists are available in Appendices A-N of the Procedures to assist in making sure a thorough QC is conducted.

TIP: USE QUALITY CONTROL LISTS AND FORMS TO HELP GUIDE YOU.

The Review Comment Resolution form and other helpful tools are online and available for download.

Overcome Conflict and Differences

In any team environment there will be times when conflicts arise. In fact, conflicts often indicate that you have team diversity and team members are thinking innovatively about the project. When conflicts do arise, whether they involve you personally, or simply involve your team members, it is your responsibility as the Project Manager to resolve them. As you deal with conflict, be careful to control your response, rather than responding in anger. Actively listen to the situation and acknowledge the problem.

Then focus on problem solving and deal directly with the behavior. By doing these things you will be able to remain calm and keep the situation from getting out of control.

THE EIGHT STEPS TO CONFLICT RESOLUTION INCLUDE:

- 1) Get the whole story.
- 2) Remain nonjudgmental.
- 3) Set rules of mutual respect.
- 4) Uncover, define and discuss the problem.
- 5) Ask and listen.
- 6) Instill positive reinforcement.
- 7) Set goals and create an action plan.
- 8) Follow up.

CONFLICT TRAPS TO AVOID:

- Fighting for the last word.
- Saying everything is okay when it isn't.
- Not wanting to talk about it—ever.
- Superficial agreements with no follow-up.
- Not escalating issues in a timely manner.

Overcome Team Collaboration Challenges

While on one hand team diversity enhances the creativity and solutions of a team, on the other hand, the differing viewpoints can sometimes be a source of friction amongst team members. When challenges and risks stand in the way of your progress, and there will certainly be times when they do, be alert enough to recognize them and prepare to take immediate action to resolve them.

The first step in resolving such issues is escalating them according to the established project process in a timely manner. Ignoring or failing to address known issues will not make them go away, and will more than likely make them worse. Whereas dealing with problems as they arise will help the team maintain momentum and, therefore, work more effectively.

Another step in dealing with problems that arise as the team works together is getting everyone to focus on the project issue. It is human nature to point the finger of blame, but such actions divide rather than unite a team. Show team members the distinction between the collaboration problem and the people involved, and encourage them to devote their energies to developing a solution.

ASK YOURSELF THESE QUESTIONS TO RESOLVE CHALLENGES:

- Are adequate resources and authority available to meet the schedule requirements?
- Is assistance available to team members when needed?
- Are team member contributions being recognized and appreciated?
- Are team members committed to the project goals and delivery schedule?

Emphasizing to your team that members must be individually and collectively accountable and responsible for their assignments will eliminate some challenges. However, if you find that you are having a problem with the team, for example, if the assignments are not being completed, use the following Accountability Leadership questions to diagnose the problem:

- Is the team environment safe and healthy?
- Are relationships respectful and trustworthy?
- Are regular opportunities provided for input to the organization, team goals and one's own assignments?
- Is the work valuable, personally meaningful and challenging?

If any answer is "no," re-establish a collaborative environment.

Budgets and Associated Risks

"Parkinson's Law: Work expands to fill the time available for its completion."

-Cyril Northcote Parkinson

One of your Project Manager duties is the financial control and stewardship for your project—from initiation through project closeout. You are responsible to develop, monitor, update and report your project budget continually. This involves keeping tabs on your team to ensure that they are working effectively and efficiently within the allotted time and budget. It may also involve making adjustments to the project or team strategy if the budget or timeline prove to be unrealistic.

As a team member you also hold a large role in the budget equation. This involves much more than simply tracking major budget items, although that is certainly a part of the responsibility. Your job also involves financial tasks such as helping to implement practical design into the project design goals using the **UDOT Practical Design Guide**. As the project progresses, you will need to consider the overall stewardship of funds for every financial change and notice risks and immediately take action.



As Project Manager you are responsible for following the guidance of the Project Budget Recovery Process at the award of construction. You also review, confirm funding availability and act on all change orders submitted by the construction team.

The team is responsible for assisting in the budgeting process. Assign each group leader a budget for their responsibilities and review the overall project budget together at every milestone meeting. This will allow you to maintain a view of the big picture budget, while allowing team members to take charge of their individual areas.

Summary

By its very nature, innovation involves a certain level of risk taking. Every project will contain some element of risk. However, these risks need to be managed in such a way that they don't jeopardize the success of the project. An environment where the entire team is consciously looking for and alerting the Project Manager about risk factors will keep things on course and moving forward.

KEY 6:

Evaluating the Project



"One of the great mistakes is to judge policies and programs by their intentions rather than their results."

-Milton Friedman

Evaluating your project can be part of a useful learning process. While assessing progress along the way is necessary, taking time once the project is complete to fully evaluate it and chronicle the highs and lows will serve you and your team as you work on other projects, as well as others who wish to complete similar projects.

Lessons Learned

While the project is in progress, allow time in regular team meetings for members to share successes and lessons. Not only can the team learn from these, but the process will also build trust and **open communication** for the team.

When your project is complete, review **change orders** for issues that should be addressed in future specifications, standard drawings, design and request for proposal development. Discuss these and other lessons learned at the post construction conference and communicate the information to section leaders as appropriate. Seek opportunities to share these and other lessons identified in the field with design, right of way, hydraulics, environmental, structures, and other Project Managers and regions.

Celebrate and Share Successes Publicly

Taking time at the end of your project to celebrate the successes will go a long way to instilling an overall sense of accomplishment within team members, but it's important to recognize the team's efforts along the way as well. Calling attention to project milestones and the extra efforts of team members helps to boost morale and keep people motivated and engaged, even though at times the going may get rough.

TIP: WHEN SEEKING TO HIGHLIGHT ACCOMPLISHMENTS:

- Acknowledge and celebrate team members in person, sincerely and at the time of achievement.
- Acknowledge and reward team members that communicate changing circumstances, new information or potential risks.
- Express appreciation for the extra effort of team members.
- · Acknowledge desirable actions and results of individual team members and the team.
- Pass on praise received from others to team members immediately.
- Acknowledge team members contributions to enhance their confidence and encourage them to acknowledge others.

SUGGESTIONS FOR CELEBRATING AND ACKNOWLEDGING TEAM MEMBERS:

- Acknowledge individual and team accomplishments during team meetings.
- Deliver a personal note of thanks for members who accomplish their assignments.
- Encourage team members to "high five" each other.
- Acknowledge a team member or sub-team during a full team meeting and encourage people to clap in appreciation.

- Arrange a special gathering to celebrate milestone accomplishments.
- Nominate a team member or project team for a formal UDOT professional or industry award.

SUGGESTIONS FOR CELEBRATING AND ACKNOWLEDGING THE TEAM AND PROJECT:

- Celebrate the successful completion of each milestone.
- Celebrate and acknowledge the end of the project before disbanding the project team.
- > Identify and document specific positive results for the project UDOT and stakeholders.
- Nominate the project for a formal UDOT, professional or industry award.
- Think of ways to let the public know what the project has accomplished and the good it provides to the community.

Summary

Taking the time to evaluate a project is the final step in its completion. Analyzing and documenting the highs and lows will provide valuable insight into the process for you, the team and future teams. Celebrating the successes of the project boosts the morale and confidence of team members and provides a springboard for future successes.

Resources & References

Leading a team is never an easy job, but the following resources and references are aimed at making the process go a little bit smoother. The information here is designed to be used in conjunction with the team building guide or as a way to quickly brush up on terms, concepts and ideas.

9,9 LEADERSHIP

A tool developed by Blake and Mouton to help leaders more effectively lead teams. The tool categorizes leaders into two dimensions, concern for productivity and concern for people.

Learn More

See the Document: 9,9 Grid and Self-Assessment

ACCOUNTABILITY LEADERSHIP

A book by Gerald Kraines on how to strengthen productivity through sound managerial leadership. **Learn More**

ACTIVE LISTENING

Active listening is about more than simply hearing the words someone is saying. When you are actively listening, you are hearing, understanding and interacting with another person.

Learn More

AGENDA

An effective meeting starts out with planning, including the formation of an agenda. An agenda will help keep the meeting on track and make sure all key topics are discussed.

Learn More

See the Document: Meeting Preparation Checklist

CELEBRATE

Celebrating the completion of a milestone, or the project itself, can help increase morale and energize the team to continue on to the next milestone.

Learn More

CHANGE ORDERS

Change orders are a great tracking tool.

They help to identify scope creep as well as mark specifications that should be taken into consideration on future projects.

See the Document: UDOT Change Order Policy - UDOT 08B-10

CHECK IT OUT

Make sure everyone comprehends a particular topic, role or responsibility by exploring the individual or team's understanding.

Learn More

CHIEF INNOVATION OFFICER

A Harvard Business Review on creative leadership promotes the use of a Chief Innovation Officer.

See the Document: Next-Generation ClOs

COLLABORATE

To collaborate means to work, one with another; cooperate. When a team collaborates, all team members work together to achieve success as defined by the project mission and goals.

COLLABORATIVE ENVIRONMENT

A collaborative environment is one that stimulates effective and efficient teamwork.

Learn More

COMMUNICATION STRATEGY

A plan for communicating effectively with the individuals making up a diverse team.

Learn More

CONFLICT TRAPS

These are habits, often unbeknownst to the individual that tend to cause conflict with team members.

Learn More

DECISION TREE

The decision tree is a tool to help all levels of a team become better decision makers and develop grassroots leadership.

Learn More

DELEGATE

Effective delegation, the act of appointing responsibility and tasks to another, will help grow the organization by teaching others valuable skills through on-the-job training. Learning to delegate properly will also increase your value to the organization.

Learn More

DEVELOPMENTAL SEQUENCE IN SMALL GROUPS

A short article published in 1965 by Bruce W. Tuckman. The article revealed a new model for group development—forming, storming, norming and performing.

Learn More

DIVERSITY

The appropriate level of team diversity, including a variety of backgrounds, personalities and styles, allows for more effective team output, especially in innovation and creativity of solutions.

Learn More

DIVERSITY TRUMPS ABILITY

Scott E. Page, professor of complex systems, political science and economics at the University of Michigan, had applied mathematical modeling and case studies to prove that teams of strong, but diverse individuals outperform teams of the best individuals with similar perspectives and ways of approaching a problem. Solution-finding lies in the greater possibility created through the collective combination of diverse ideas and approaches.

Learn More

EFFECTIVE MEETINGS

Effective meetings will make sure the team has a firm mandate, strategic direction, and actionable information, while making participants feel motivated and respected.

Learn More

EIGHT STEPS TO CONFLICT RESOLUTION

Conflict is bound to arise in a team environment. However, there are ways to handle and mitigate it, including the Eight Steps to Conflict Resolution.

Learn More

ELECTRONIC PROGRAM MANAGEMENT (ePM) SETUP GUIDE

An electronic system providing information on the planning, funding, scheduling and staffing of UDOT design projects to UDOT employees, local government customers and consultants.

FEEDBACK

Feedback is an essential part of leading and working with a team. It provides team members with the direction they need to carry out their role successfully.

Learn More

FIERCE CONVERSATIONS, ACHIEVING SUCCESS AT WORK AND IN LIFE, ONE CONVERSATION AT A TIME

A book by Susan Scott on delegation and effective decision-making.

GROUND RULES

Ground rules help to guide a team and establish policies and processes especially for communication objectives.

Learn More

HOW TO DO THE RIGHT THING

A book by Leslie Yerkes on empowering employees and team members to make decisions confidently and successfully take action on their own.

Learn More

INNOVATIVE CONTRACTING

The following description is an excerpt from the Utah Local Technical Assistance Program (LTAP) Center's website: With the extensive maintenance, rehabilitation, and reconstruction work that is being done on our street/road systems at the local, state, and Federal levels, road user costs due to delays and detours is mounting. The conventional process of contracting (design-bid-build and low-bid award) does not effectively recognize and take these mounting user costs into account. As a result, there is a nationwide trend to use the following innovative contracting techniques:

- Design-Build (i.e. I-15 project)
- Lane Rental

- · A+B Bidding
- A+B+C Bidding
- Job Order Contracting
- Warranties

The Utah T2 Center is developing a "Best Practices Guide" for the above-mentioned innovative contracting techniques for UDOT, the Federal Highway Administration, and AASHTO. Currently, we have collected detailed information on each of these techniques and have developed a searchable database with pertinent details and specification provisions that can be queried and downloaded from the Innovative Contracting Website at http://www.ic.usu.edu.

INVOLVEMENT/IMPACT GRID

An involvement/impact grid can be helpful when establishing collaborative environment. This tool will help in developing the appropriate communication strategy for each individual.

Learn More

See the Document: Involvement/Impact Grid

KICK-OFF MEETING

The first team meeting held with all individuals involved in a project. This meeting covers the project vision and goals as well as the roles and responsibilities of the team members.

Learn More

KNOW, FEEL, DO METHOD

Bill Jensen teaches this method in the books Simplicity Survival Handbook and Simplicity.

LEADERSHIP STRATEGIES

There are a plethora of leadership strategies out there; so many that looking for information can be overwhelming. UDOT has identified some strategies that work effectively for UDOT projects.

Learn More

MAKE YOUR GOOD TEAM GREAT

A Harvard Business Review on building highpreforming teams, such as teams possessing high levels of group emotional intelligence (EI).

Learn More

MILESTONE

A significant event or stage in the progress or development of a project. Establishing milestones early on in a project will help to keep the project on schedule.

Learn More

OPEN COMMUNICATION

Open communication helps a team to communicate on a number of topics and on varying levels. Being open will help develop trust amongst the team and help to ensure every team member understands the project goals as well as their roles.

Learn More

PARTNERING TOOL

Partnering is a way of conducting business in which two or more organizations make long-term commitments to achieve mutual goals. This requires team-based relationships utilizing open communication based on trust, understanding and teamwork. The objective of partnering is to alleviate negative implications such as poor communication, lost productivity and funds, damaged relationships and adverse attitudes.

Learn More

PROJECT BUDGET RECOVERY PROCESS

A process intended to make better use of transportation funds by adjusting the project cost projection at the time of construction award to recover any remaining funds.

See the Document: Budget Recovery Process

PROJECT DEFINITION DOCUMENT (PDD)

The Project Definition Document serves as a project communication and reporting tool for the project team and senior leaders, and will assist team handoff transitions. The content serves to record the initial scope, schedule, budget and goals of the project. As the project progresses this tool will record changes and decisions and will function as a journal throughout the life of the project.

See the Document: Project Definition Document

QUALITY ASSURANCE

Varifies that Quality Control proceedures have been completed and the quality process has occurred.

See the Document: Quality Control Documentation

QUALITY CONTROL

The ongoing, comprehensive, independent checking and varification of the activities that lead to a final product that meets or exceeds UDOT requirements.

See the Document: Quality Control Documentation

QUALITY CONTROL/QUALITY ASSURANCE PROCEDURES

QC/QA Procedures assist the project team in creating designs that are safe, economical, constructible, maintainable, aesthetic and appropriate for the project location and surroundings.

See the Document: UDOT QC/QA Procedures
See the Document: Quality Control Documentation

RESOLVING RISK

Not all risks and challenges can be prevented, but by being alert enough to recognize them and prepared to take immediate action to resolve them, their effects can be mitigated.

Learn More

REVIEW COMMENT RESOLUTION FORM

Reviews are performed at milestones in the design phase to verify the project design meets UDOT expectations, conforms to standards and is on track for delivery. The comment resolution form documents all review comments and the action taken to address each comment.

See the Document: Form F - Review Comment Resolution Form

RISK

Exposure to chance of unwanted results on a project and failure to meet the project's performance criteria. Major project risk components include cost overrun and schedule delay.

Learn More

RISK ELEMENTS/SAMPLE RISK LIST

The list is used as a tool in the risk identification process. Lists are comprehensive—listing the various types of risk that have been encountered during prior projects.

Learn More

See the Document: FHWA's Guide to Risk Assessment and Allocation for Highway Construction Management

See the Document: FHWA Sample Risk List

RISK TRACKING AND ANALYSIS TOOL FOR SMALL AND MEDIUM PROJECTS

The following description is an excerpt from FHWA's Guide to Risk Assessment: The objectives of a risk identification tool are to (1) identify and categorize risks that could affect the project and

(2) document these risks. The outcome of risk identification is a list of risks. What is done with the list of risks depends on the nature of the risks and the project.

On noncomplex, low-cost projects with little uncertainty (few risks), the risks may be kept simply as a list of red flag items. The items can then be assigned to individual team members to watch throughout the project development process and used for risk allocation purposes.

On complex, high-cost projects that are by nature uncertain, the risks can feed the rigorous process of assessment, analysis, mitigation and planning, allocation and monitoring and updating.

See the Document: FHWA's Guide to Risk
Assessment and Allocation for Highway
Construction Management

See the Document: UDOT Risk Management Plan

ROLES & RESPONSIBILITIES

For a team to work effectively each team member must be responsible for contributing their knowledge based on their role and meeting all tasks and requirements set forth.

Learn More

SITUATIONAL LEADERSHIP

The following description is an excerpt from Hersey-Blanchard Situational Leadership Theory:

Instead of using just one style, successful leaders change their leadership styles based on the knowledge, skills and confidence of the people they're leading and the details of the task. A situational leader adjusts emphasis on the task to emphasis on the abilities of the people they're leading, depending on what's needed to get the job done successfully.

STAGES OF CHANGE

The stages of change, introduced to UDOT by Dr. Tom DeCoster, outlines a team's state of well being as it pertains to change, allowing a team to properly deal with it.

Learn More

TEAM DEVELOPMENT GRAPHS

A tool used to help guide and determine the appropriate leadership style to be used with a team.

Learn More

TEAM FORMATION CHECKLIST

A tool to help ensure that all appropriate team members are included on the team no matter how big or small their role is.

See the Document: Team Formation Checklist

TEAM HEALTH CHECKLIST

A healthy team will run more smoothly and produce a better end product. Set and conduct team health checkups at regular intervals (at least quarterly) using team-developed metrics.

Learn More

UDOT FINAL FOUR

With the many transportation challenges Utah faces, UDOT implements a four-pronged strategy to address the safety, congestion and maintenance needs across the state.

See the Document: *UDOT Strategic Direction and Performance Measures*

UDOT FUNDING CYCLE

Funds for all projects managed by UDOT come from a variety of sources, ranging from state money allocated by the legislature, to federal aid funds designated for specific types of projects.

Combined, this sum of money keeps our roads up to code and provides funding for new projects.

Learn More

See the Document: FHWA - A Guide to Federal-Aid Programs and Projects

UDOT MISSION

UDOT is about more than roads, repairs and maintenance. Our mission is: "Quality Transportation Today, Better Transportation Tomorrow."

UDOT is responsible for over 6,000 miles of highways—14% of the state's total highway road system. This responsibility includes snow removal, signage, bridges, repairs, building and maintenance as well as the Traffic Operations Center with live camera coverage for monitoring road conditions, accidents and safety.

Learn More

UDOT PRACTICAL DESIGN GUIDE

Practical Design supports UDOT's continuing emphasis on innovation, cost savings, and providing the public with the transportation system that meets their needs. The goal of Practical Design is to only build right sized projects that meet focused needs. This allows UDOT to spread limit resources more effectively throughout the transportation system.

Learn More

UDOT PROJECT DELIVERY NETWORK

The Project Delivery Network is a template outlining the stages, activities and tasks used for producing successful projects.

Learn More

See the Document: *UDOT Project Delivery Networks (2011)*

